

Name _____ Period _____ Group _____

Warm-up 1

SHOW ALL WORK

Date _____ Score _____

1. Order from **least to greatest**: -3, 5, -7
2. Simplify: $5 \times 2 - 8 =$
3. If $a = 3$ and $b = 4$, then $a^2 + b =$
4. Find the next two numbers in the following pattern: 3, 6, 9, 12, ____, ____
5. Simplify: $4^2 =$
6. Find $2a + 3b - c$ if $a = 5$, $b = 2$, and $c = 3$

Name _____ Period _____ Group _____

Warm-up 2

SHOW ALL WORK

Date _____ Score _____

1. Order from **least to greatest**: 2, -2, $\frac{1}{2}$
2. Simplify: $4 + (-7) =$
3. If $a = 3$ and $b = 8$, then $2a - b =$
4. Find the next two numbers in the following pattern: 1, 5, 9, 13, ____, ____
5. Find $2a - b$ if $a = 5$ and $b = -3$
6. Solve: $x + 3 = 8$

Name _____ Period _____ Group _____

Warm-up 3

SHOW ALL WORK

Date _____ Score _____

1. Order from **least to greatest**: 0.3 , $\frac{1}{2}$, 0.56
2. Simplify: $4 - (-7) =$
3. If $a = 3$ and $b = -4$, then $a^2 - b =$
4. Find the next two numbers in the following pattern: $16, 11, 6, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}$
5. $-3 + (-5) =$
6. Simplify: $|-3| =$

Name _____ Period _____ Group _____

Warm-up 4

SHOW ALL WORK

Date _____ Score _____

1. Order from **greatest to least**: $\frac{1}{3}$, -2 , 0
2. Simplify: $|2 - 7| =$
3. If $a = -3$ and $b = 2$, then $2a - 3b =$
4. Solve: $4(10 + 2) =$
5. $2 - 5^2 =$
6. Solve: $x - 2 = 5$

Name _____ Period _____ Group _____

Warm-up 5

SHOW ALL WORK

Date _____ Score _____

1. Find the next two numbers in the following pattern: 2, -4, -10, _____, _____

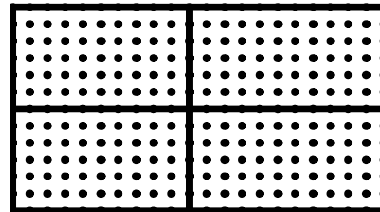
2. Simplify: $3(x + 2) =$

3. If $a = -3$ and $b = 2$, then $a + 3b =$

4. $-6 - (-5) =$

5. Solve for x : $x + 4 = 2$

6. Graph the point: (2, 5)



Name _____ Period _____ Group _____

Warm-up 6

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4(x - 2) =$

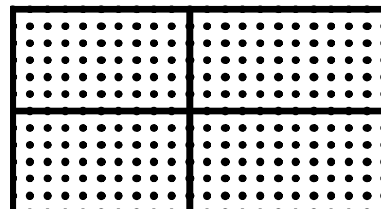
2. Simplify: $|-3 + 2(5)| =$

3. Plot the points on a number line:

4. Order of operations: $2 + 3(5 - 9) =$

5. Compare: 0.25 _____ -3

6. Graph the point: (1, 3)



Name _____ Period _____ Group _____

Warm-up 7

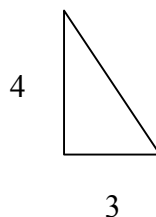
SHOW ALL WORK

Date _____ Score _____

1. $2 + 4(3) =$

2. Simplify: $4(-7) =$

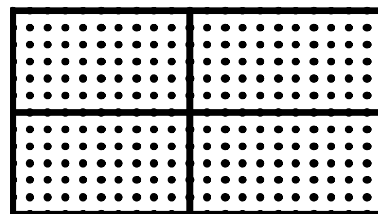
3. Ref Sheet: Find the area of this right triangle:



4. Find the next two numbers in the following pattern: 8, 12, 17, 23, _____, _____

5. Simplify: $a^2 + 3a + 2a^2$

6. Plot the point $(-2, 4)$



Name _____ Period _____ Group _____

Warm-up 8

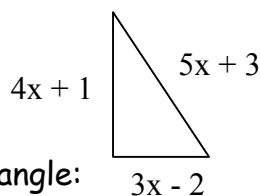
SHOW ALL WORK

Date _____ Score _____

1. $-4(-3) =$

2. Solve: $3x = 18$

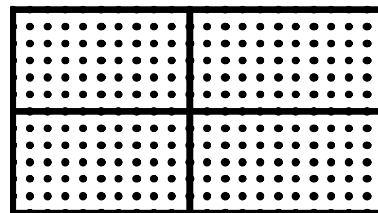
3. Ref Sheet: Find the perimeter of this right triangle:



4. Find the seventh term in the following pattern: 1, 1.5, 2, 2.5, 3 ...

5. Simplify: $a^2 + 3a + 2a^2 - 1$

6. Plot the point $(2, 5)$



Name _____ Period _____ Group _____

Warm-up 9

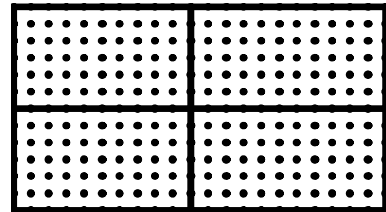
SHOW ALL WORK

Date _____ Score _____

1. $6^2 - 4(-3) =$

2. Solve: $2x + 3 = 19$

3. If we start with 3 pennies in a jar, but add 5 pennies each day, how many pennies would be in the jar at the end of day 1? _____ at the end of day 2? _____ 3? _____



4. Plot the point (2, -5)

Name _____ Period _____ Group _____

Warm-up 10

SHOW ALL WORK

Date _____ Score _____

1. $6^2 - 4(-3) =$

2. $5 + 3(5 - 2) =$

3. $(-4)(-8) =$

Solve for x:

4. $2x + 3 = 19$

5. $3(x + 2) = 15$

6. $4 + 3x = -2$

Name _____ Period _____ Group _____

Warm-up 11

SHOW ALL WORK

Date _____ Score _____

Simplify

1. $2(x + 1) + 7x =$

2. $2x(x + 1) =$

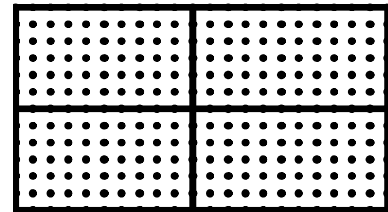
3. $5^2 - 3^2 =$

Solve for m:

4. $3 - 2m = -11$

5. $-5m = 40$

6. Plot the point: $(-3, -4)$



Name _____ Period _____ Group _____

Warm-up 12

SHOW ALL WORK

Date _____ Score _____

Simplify

1. $\frac{(-3)^2 + 5}{2} =$

2. $2x(x - 3) =$

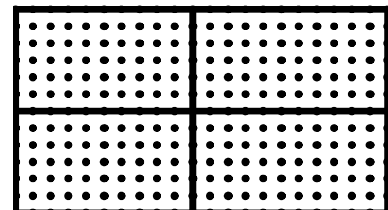
3. $\sqrt{16} =$

Solve for d:

4. $2d + 3(d + 1) = 18$

5. $\frac{3}{6} = \frac{d}{18}$

6. Plot the points: $(-3, -4)$ and $(1, 1)$



Name _____ Period _____ Group _____

Warm-up 13

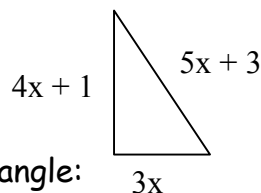
SHOW ALL WORK

Date _____ Score _____

1. $-4 + (-3) =$

2. Solve: $3x + 1 = 28$

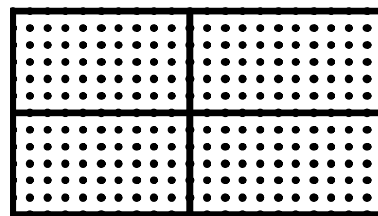
3. Ref Sheet: Find the perimeter of this right triangle:



4. Simplify: $a^2 + 3a + 2a^2 - 1$

5. Solve: $2x + 3 = 4x - 7$

6. Plot the points $(2, 5)$ and $(-1, 1)$



Name _____ Period _____ Group _____

Warm-up 14

SHOW ALL WORK

Date _____ Score _____

1. $6^2 + 4(-2) =$

2. Solve: $2x + 3 = 3 + (x + 1)$

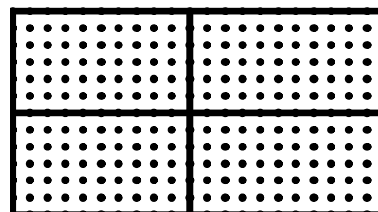
If we start with 4 pennies in a jar, but add 3 pennies each day, how many pennies would be in the jar at the end of

3. day 1? _____

4. day 2? _____

5. day 3? _____

6. Draw a line going through the points $(2, -5)$ and $(4, 2)$



Name _____ Period _____ Group _____

Warm-up 15

SHOW ALL WORK

Date _____ Score _____

Simplify

1. $2(x + 1) + 7x =$

2. $2x(x + 1) =$

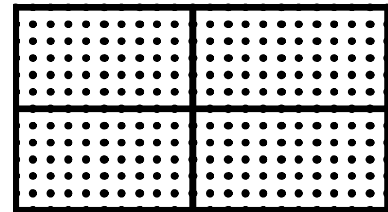
3. $5^2 - 3^2 =$

Solve for m:

4. $3 - 2m = 11$

5. $-5m = 40$

6. Plot the point: $(-3, -4)$



Name _____ Period _____ Group _____

Warm-up 16

SHOW ALL WORK

Date _____ Score _____

Simplify

1. $\frac{(-4)^2 + 6}{2} =$

2. $2x(x - 3) =$

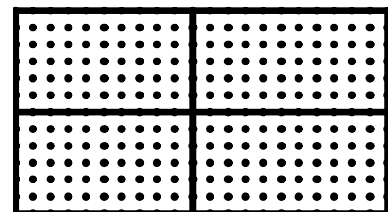
3. $\sqrt{4} =$

Solve for d:

4. $2d + 3(d + 1) = 18$

5. $\frac{3}{6} = \frac{12}{d}$

6. Draw the line thru the points: $(-3, -4)$ and $(1, 1)$



Name _____ Period _____ Group _____

Warm-up 17

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4x - 7x + 3$

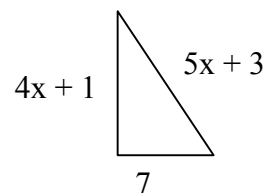
2. Evaluate: $3x + 2(x - 1) = 27$

3. Simplify: $a^2 + 3a + 2a^2 - 5a$

4. Solve: $2x + 3 = 4x - 4$

5. Order from **greatest to least**: $-2, 1, -4, -1/2$

6. Ref Sheet: If the perimeter of this right triangle is 34 units, find the value of x .



Name _____ Period _____ Group _____

Warm-up 18

SHOW ALL WORK

Date _____ Score _____

1. $6^2 - 4(-2) =$

2. Solve: $2x + 3 = 3 + (x + 1)$

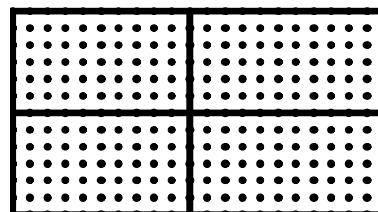
Aly earns \$7 per week and is currently saving all of her money. How much will she have at the end of

3. week 1? _____

4. week 2? _____

5. week 3? _____

6. Draw a line going through the points
 $(2, -5)$ and $(4, 2)$



Name _____ Period _____ Group _____

Warm-up 19

SHOW ALL WORK

Date _____ Score _____

Simplify

1. $2(x + 1) - (-7x) =$

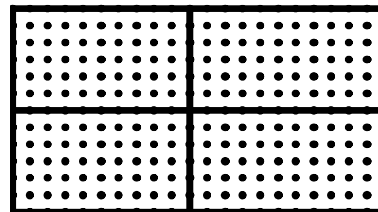
2. If $a = 3$ and $b = 6$, then $a^2 - b^2 =$

3. $\sqrt{13}$ is between what two whole numbers?

4. If Margarita charges \$6 per hour for babysitting, and baby sits for 4 hours every weekday, how much does she make in one week?

5. $\frac{3}{4} = \frac{x}{8}$

6. Plot the points: $(-3, -4)$ and $(2, 3)$



Name _____ Period _____ Group _____

Warm-up 20

Date _____ Score _____

Simplify

1. $3x + 6 = 15$

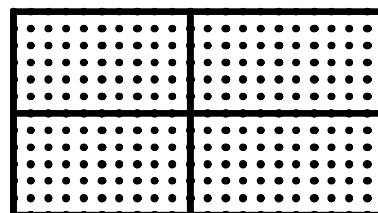
2. Dylan is making cookies. The recipe calls for 2 cups of flour to make 8 cookies. How many cups of flour does Dylan need to make cookies for our class (there are 32 of us!)?

3. $\frac{(-4)^2 + 6}{2} =$

4. Order from **least to greatest**: $2, 1/3, 5, \sqrt{16}$

5. $2d + 3(d + 1) = 18$

6. Draw the line thru the points: $(-3, -4)$ and $(1, 1)$



Name _____ Period _____ Group _____

Warm-up 21

SHOW ALL WORK

Date _____ Score _____

Solve.

1. $x + \frac{1}{2} = 1$

2. $2x + 4x + 2 = 26$

3. $3(2x - 4) = 24$

4. Complete the pattern.

x	1	3	5	7		
y	10	20	30	40		

5. Simplify. $\frac{5x+10}{5}$

6. Simplify. $-3(x - 5)$

Name _____ Period _____ Group _____

Warm-up 22

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4x - 7x + 3$

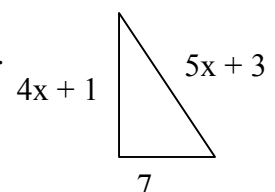
2. Order from **greatest to least**: $-2, 1, -4, -\frac{1}{2}$

3. Simplify: $a^2 + 3a + 2a^2 - 5a$

4. Solve: $2x + 3 = 4x - 4$

5. Solve: $3x + 2(x - 1) = 27$

6. If the perimeter of this right triangle is 34 units, find the value of x.



Name _____ Period _____ Group _____

Warm-up 23

SHOW ALL WORK

Date _____ Score _____

1. $6^2 - 4(-2) =$

2. Solve: $2x + 3 = 3 + (x + 1)$

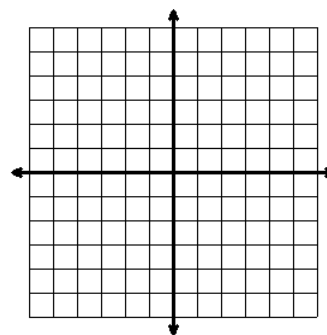
Aly earns \$7 per week and is currently saving all of her money. How much will she have at the end of

3. week 1? _____

4. week 2? _____

5. week 3? _____

6. Draw a line going through the points (2, -5) and (4, 2).



Name _____ Period _____ Group _____

Warm-up 24

SHOW ALL WORK

Date _____ Score _____

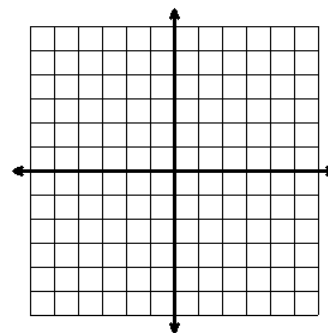
1. If $a = 3$ and $b = 6$, then $a^2 - b^2 =$

2. $\sqrt{13}$ is between what two whole numbers?

3. If Margarita charges \$6 per hour for babysitting, and baby sits for 4 hours every weekday, how much does she make in one week?

4. Solve: $\frac{3}{4} = \frac{x}{8}$

5. Plot the points: (-3, -4) and (2, 3)



Name _____ Period _____ Group _____

Warm-up 25

SHOW ALL WORK

Date _____ Score _____

1. Solve: $3x + 6 = 15$
2. Dylan is making cookies. The recipe calls for 2 cups of flour to make 8 cookies. How many cups of flour does Dylan need to make cookies for our class (there are 32 of us!)?
3. Simplify: $\frac{(-4)^2 + 6}{2} =$
4. Order from **least to greatest**: 2, $\frac{1}{3}$, 5, $\sqrt{16}$
5. Solve: $2d + 3(d + 1) = 18$

Name _____ Period _____ Group _____

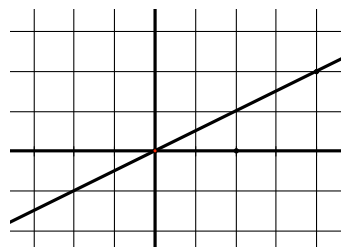
Warm-up 26

SHOW ALL WORK

Date _____ Score _____

1. Reduce the fraction: $\frac{2}{4} =$
2. Find the rate of change (slope) according to this table:
3. Does the line in the graph to the right have a positive or negative slope?
4. Simplify: $3(4x + 1) - (-8x)$
5. Solve: $2 + 3(4x - 6) = 20$

x	0	3	6	9
y	5	10	15	20



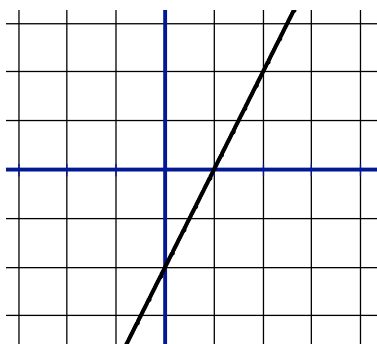
Name _____ Period _____ Group _____

Warm-up 27

SHOW ALL WORK

Date _____ Score _____

1. Write 25% as a fraction.
2. What two whole numbers is $\sqrt{40}$ between?
3. Solve: $10x - 6 = 6x + 22$
4. Find the slope of the line.



Name _____ Period _____ Group _____

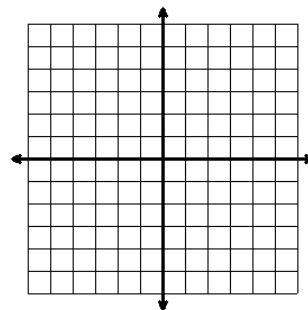
Warm-up 28

SHOW ALL WORK

Date _____ Score _____

1. Between what two whole numbers is $\sqrt{8}$. Show how you know this.
2. If Adel is known for making 4 out of 6 baskets while shooting free throws, how many times would he have to shoot to make 24 baskets?
3. Solve: $3(2x - 4) = 24$
4. Find the slope using the following table:

x	1	3	5	7
y	10	20	30	40
5. Plot points: (1,1) and (2, 3), then find the slope.



Name _____ Period _____ Group _____

Warm-up 29

SHOW ALL WORK

Date _____ Score _____

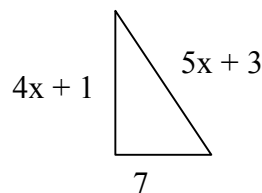
1. Simplify: $3 + 2(x - 1)$

2. Find the slope of this linear function:

x	2	4	6
y	6	12	18

3. Simplify: $\frac{0}{5} =$

4. Find the perimeter if $x=2$.



5. If Aly mows 2 lawns in 3 hours, how long will it take her to mow 8 lawns?

Name _____ Period _____ Group _____

Warm-up 30

SHOW ALL WORK

Date _____ Score _____

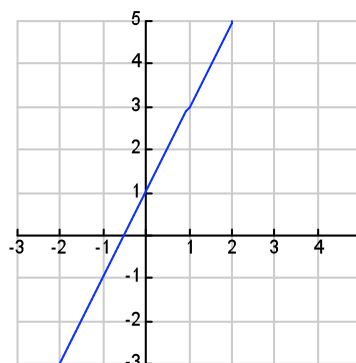
1. Solve: $2(x + 3) = 8(x - 1)$

2. If $c = -3$ and $d = 2$, then $2c^2 - 5d =$

3. If Kenzie buys 3 cookies for \$1.00, how much would it cost her to buy 30 cookies?

4. Find the equation of the line to the right:

5. Simplify: $6^2 - 4(-2) =$



Name _____ Period _____ Group _____

Warm-up 31

SHOW ALL WORK

Date _____ Score _____

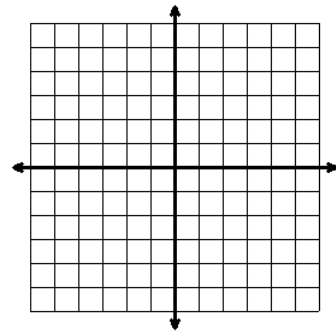
1. Simplify: $2 + 3(x - 4) - 7x$

2. Solve: $2x - 1 = 3 - 4(x + 4)$

3. $\sqrt{40}$ is between what two whole numbers?

4. Solve: $\frac{4}{7} = \frac{12}{x}$

5. Graph: $y = 2x - 3$



Name _____ Period _____ Group _____

Warm-up 32

SHOW ALL WORK

Date _____ Score _____

1. Solve: $x + \frac{1}{2} = 1$

2. Solve: $2x + 4x + 2 = 26$

3. Solve: $3(2x - 4) = 24$

4. Complete the pattern:

x	1	3	5	7	
y	10	20	30	40	

5. Simplify: $\frac{5x + 10}{5}$

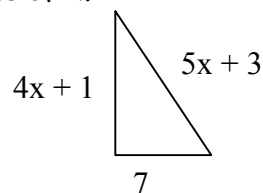
Name _____ Period _____ Group _____

Warm-up 33

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4x - 7x + 3$
2. Order from **greatest to least**: $-2, 1, -4, -\frac{1}{2}$
3. Simplify: $a^2 + 3a + 2a^2 - 5a$
4. Solve: $3x + 2(x - 1) = 27$
5. If the perimeter of this right triangle is 34 units, find the value of x .



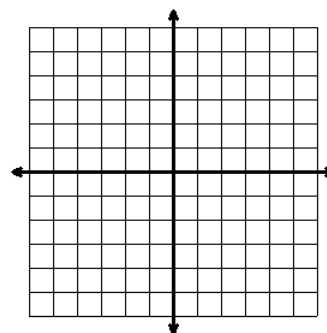
Name _____ Period _____ Group _____

Warm-up 34

SHOW ALL WORK

Date _____ Score _____

1. Solve: $6^2 - 4(-2) =$
 2. Solve: $2x + 3 = 3 + (x + 1)$
- Aly earns \$7 per week and is currently saving all of her money.
How much will she have at the end of
3. Week 1? _____
 4. Week 2? _____
 5. Week 3? _____
6. Draw a line going through the points $(2, -5)$ and $(4, -1)$



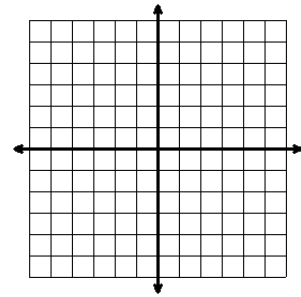
Name _____ Period _____ Group _____

Warm-up 35

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $2(x + 1) - (-7x)$
2. If $a = 2$ and $b = 4$, then $a^2 - b^2 =$
3. $\sqrt{17}$ is between what two whole numbers?
4. If Margarita charges \$7 per hour for babysitting, and baby sits for 3.5 hours every weekday, how much does she make in one week?
5. Solve: $\frac{3}{4} = \frac{x}{16}$
6. Plot the points: $(-3, -4)$ and $(2, 3)$



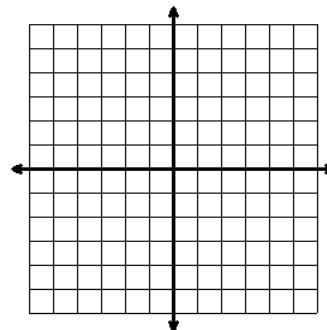
Name _____ Period _____ Group _____

Warm-up 36

SHOW ALL WORK

Date _____ Score _____

1. Solve: $3x + 6 = 15$
2. Dylan is making cookies. The recipe calls for 2 cups of flour to make 8 cookies. How many cups of flour does Dylan need to make cookies for our class (there are 40 of us!)?
3. Simplify: $\frac{(-4)^2 + 6}{2} =$
4. Order from **least to greatest**: 2, $\frac{1}{3}$, 5, $\sqrt{16}$
5. Solve: $2d + 3(d + 1) = 18$



Name _____ Period _____ Group _____

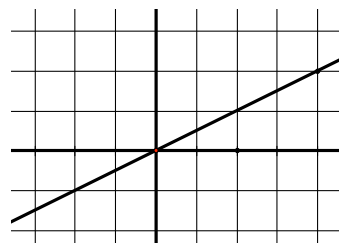
Warm-up 37

SHOW ALL WORK

Date _____ Score _____

1. Reduce the fraction: $\frac{14}{28} =$
2. What two whole numbers is $\sqrt{33}$ in between?
3. Find the rate of change (slope) according to this table:
4. Solve: $2 + 3(4x - 6) = 20$
5. Does the line to the right have a positive or negative slope?

x	0	3	6	9
y	5	10	15	20



Name _____ Period _____ Group _____

Warm-up 38

SHOW ALL WORK

Date _____ Score _____

1. If two pencils cost \$1.50, how many pencils can you buy with \$9.00?

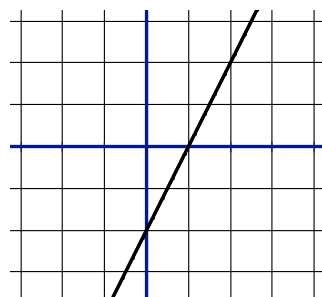
2. What two whole numbers is $\sqrt{83}$ in between?

x	0	2	4	6
y	10	7	4	1

3. Find the rate of change (slope) according to this table:

4. Solve: $10x - 6 = 6x + 22$

5. Find the slope of the line to the right:



Name _____ Period _____ Group _____

Warm-up 39

SHOW ALL WORK

Date _____ Score _____

1. If Adel is known for making 4 out of 6 baskets while shooting free throws, how many times would he have to shoot to make 24 baskets?

2. Solve: $3(2x-4)=24$

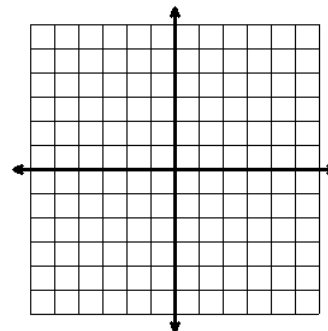
3. Find the slope.

x	1	3	5	7
y	10	20	30	40

4. If the table at the right is linear, find the slope:

x	y
1	4
2	7

5. Plot points $(-1,1)$ and $(2,3)$, then find the slope.



Name _____ Period _____ Group _____

Warm-up 40

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $3 + 2(x - 1)$

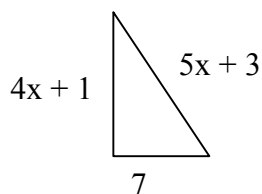
2. Order from **greatest to least**: $\sqrt{4}, 3, 4.25, -2$

3. Find the slope of this linear function:

x	2	4	6
y	6	12	18

4. Describe a line with the following slope: $\frac{5}{0}$

5. Find the perimeter if $x=4$.



Name _____ Period _____ Group _____

Warm-up 41

SHOW ALL WORK

Date _____ Score _____

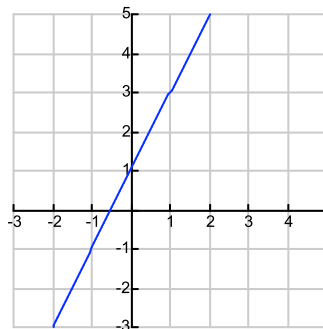
1. Solve: $4(x + 1) = 4x + 4$

2. Simplify: $5x^2 + 3y - 2x^2 + y$

3. If $c=3$ and $d=-2$, find $2c^2 - 5d$.

4. Find the equation of the line to the right:

5. If $y = 3x - 4$, find y if $x = 2$.



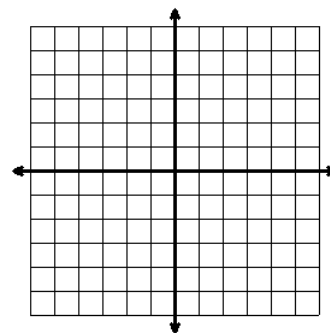
Name _____ Period _____ Group _____

Warm-up 42

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $2 + 3(x - 4) - 7x$
2. Solve: $2x - 1 = 3 - 2(x + 4)$
3. $\sqrt{40}$ is between what two whole numbers?
4. Solve: $\frac{7}{4} = \frac{x}{12}$
5. Graph: $y = 3x - 2$



Name _____ Period _____ Group _____

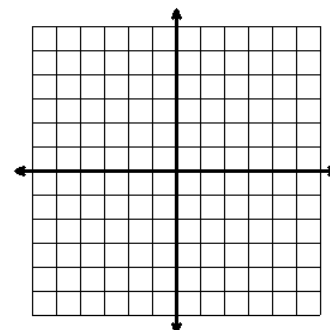
Warm-up 43

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4 + 2(x - 5) - (4x)$
2. Solve: $6x - 1 = 3 - 2(2x + 4)$
3. Find the equation for the table to the right:
4. Solve: $\frac{3}{4} = \frac{9}{x}$
5. Graph: $y = 3x - 1$

x	0	1	2
y	5	8	11



Name _____ Period _____ Group _____

Warm-up 44

SHOW ALL WORK

Date _____ Score _____

1. Solve: $5x + 7 = 2(x + 4)$

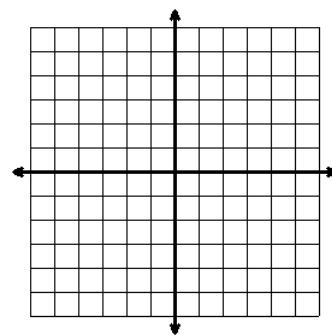
x	2	4	6
y	6	12	18

2. Find the slope of this linear function:

3. Find the slope between the two points: (1, 5) and (2, 8).

4. If you toss a quarter in the air, what is the probability that it will land heads up?

5. Graph: $y = 2x + 3$



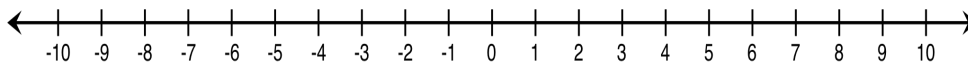
Name _____ Period _____ Group _____

Warm-up 45

SHOW ALL WORK

Date _____ Score _____

1. Graph $x \leq 7$ on the following number line.



2. Solve: $-4x + 4 < 16$

3. Order from **least to greatest**: $0.3334, \frac{1}{3}, 0.25, \frac{3}{8}$

4. Solve: $3x - 15 = 3$

5. Solve: $2[5 - (9 \div 3 \cdot 6)]$

Name _____ Period _____ Group _____

Warm-up 46

SHOW ALL WORK

Date _____ Score _____

1. What is the perimeter of this rectangle if $x = 12.6$ cm?



2. Solve for x : $3(x - 5) + 7x = -4x - 4(2x - 5)$

$2x$

3. What is the slope of the graph of the equation $y = 3x - 2$?

4. What is the slope of the graph of the equation $y = \frac{1}{3}x - 2$?

5. What is the slope of the graph of the equation $2x - 3y = 7$?

Name _____ Period _____ Group _____

Warm-up 47

SHOW ALL WORK

Date _____ Score _____

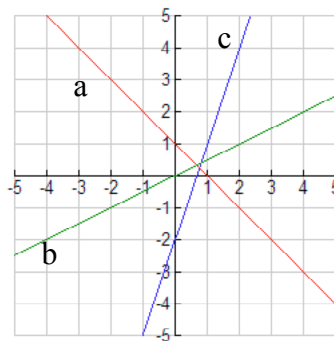
1. Solve for x : $4x - 5 = 4(x - 1) - 1$

2. Simplify: $5 \times 2 - 8 =$

3. What is the slope of line a ?

4. What is the slope of line b ?

5. What is the slope of line c ?



Name _____ Period _____ Group _____

Warm-up 48

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $8 - 5 \cdot 2$
2. If $a = 3$ and $b = 4$, then $a^2 + b =$
3. Which graph is steeper? $y = \frac{1}{3}x - 5$ or $y = \frac{2}{5}x - 2$

Tell whether the lines below have a positive slope, negative slope, zero slope, or undefined slope.

4. $y = 2x - 5$
5. $y = 7$
6. $x = -1$
7. $y = \frac{1}{3}x - 5$

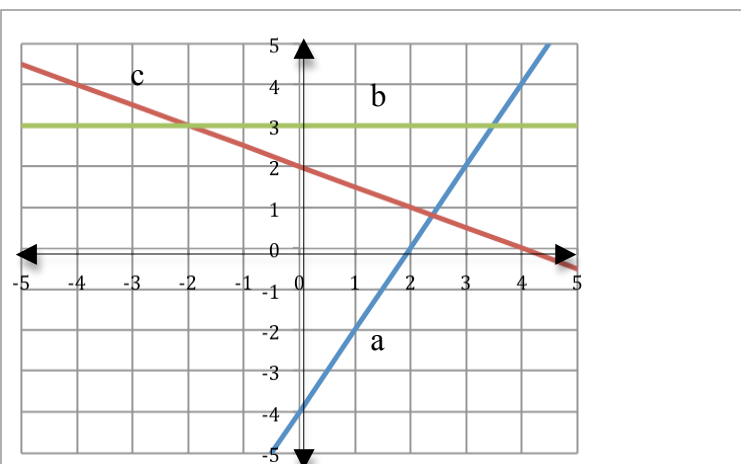
Name _____ Period _____ Group _____

Warm-up 49

SHOW ALL WORK

Date _____ Score _____

1. If $a = 4$ and $b = 3$, then $a^2 + b =$
2. Simplify: $4 + (-7) =$
3. What is the slope of line a?
4. What is the slope of line b?
5. What is the slope of line c?



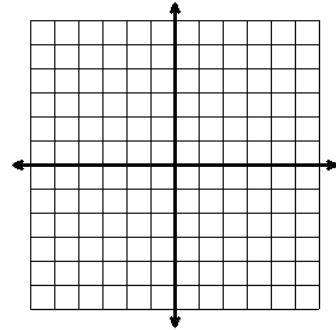
Name _____ Period _____ Group _____

Warm-up 50

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $8 \div (-4)$
2. Solve: $x + 3 = 8$
3. Graph $y=3x$ on the coordinate system to the right.
4. Graph $y=3x-2$ on the same coordinate system.
5. What do you notice about the two lines?



Name _____ Period _____ Group _____

Warm-up 51

SHOW ALL WORK

Date _____ Score _____

1. Solve: $x + 8 = -3$
2. Simplify: $|-3| =$
3. Rewrite $2x+3y=12$ in slope-intercept form.
4. Rewrite $2x-y=4$ in slope-intercept form.
5. Rewrite $x+2y=4$ in slope-intercept form.

Name _____ Period _____ Group _____

Warm-up 52

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $-|3| =$
2. $2 - 5^2 =$
3. The bill for the repair of an automobile is the total cost of parts and labor. The cost for parts was \$285. The cost of labor was \$35 per hour. Let x represent the number of hours of labor. Let y represent the total bill. Write an equation that expresses the total bill for the repair of the automobile.
4. If the total cost was \$350, how many hours of labor were needed to repair the automobile?
5. If the total cost was \$635, how many hours of labor were needed to repair the automobile?

Name _____ Period _____ Group _____

Warm-up 53

SHOW ALL WORK

Date _____ Score _____

1. Solve: $3x - 2 = 4$
2. Distribute: $3(x + 2)$
3. Write in Standard Form: $y = 2x - 4$
4. Write in Standard Form: $y = -\frac{1}{2}x + 2$
5. Write in Standard Form: $3x + 4y - 7 = 0$

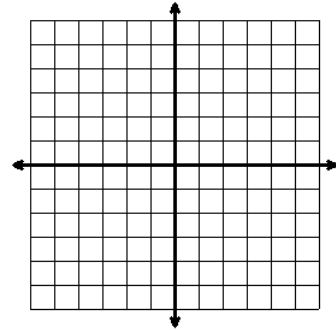
Name _____ Period _____ Group _____

Warm-up 54

SHOW ALL WORK

Date _____ Score _____

1. Distribute: $2(x - 3)$
2. Graph the following points: $(2, 5)$ and $(-3, 4)$
3. Write in slope-intercept form: $4x - 8y = 24$
4. Graph the line from question 3.



Name _____ Period _____ Group _____

Warm-up 55

SHOW ALL WORK

Date _____ Score _____

1. $5 - 2^3$
2. Solve: $3x - 2 = 4$
3. A plane flew from Salt Lake City to Washington, D.C., a distance of 2,095 miles at a constant rate of 475 miles per hour. Write an equation for its distance, y , from Washington in miles when it has been flying x hours.
4. If you had flown 2 hours, how far would you be from Washington, D.C.?
5. If you are 670 miles from Washington, D.C., how many hours have you flown?

Name _____ Period _____ Group _____

Warm-up 56

SHOW ALL WORK

Date _____ Score _____

1. Solve for x : $2x + 3 = 19$
2. Solve for x : $3(x+2) = 15$
3. Write the equation of the line that passes through $(1,2)$ and has a slope of -2 .
4. Write the equation of the line that passes through $(-1,2)$ and has a slope of $\frac{1}{2}$.
5. Write the equation of the line that passes through $(0,5)$ and has a slope of -1 .

Name _____ Period _____ Group _____

Warm-up 57

SHOW ALL WORK

Date _____ Score _____

1. Solve for x : $5(x+3)=105$
2. Solve for x : $4+3x=-2$
3. Write the equation of the line that passes through $(-2,4)$ and has a slope of $\frac{2}{3}$.
4. Write the equation of the line that passes through $(4,-2)$ and has a slope of $-\frac{1}{2}$.
5. Write the equation of the line that passes through $(0,3)$ and has a slope of -2 .

Name _____ Period _____ Group _____

Warm-up 58

SHOW ALL WORK

Date _____ Score _____

1. Solve the following inequality: $-2 - 4x \geq 10$
2. Simplify: $2(x+1) + 7x$
3. Write an equation for a line going through (3, 10) and (-1, -6).
4. Write the equation of the line that passes through (0,2) and (4,3).
5. Write the equation of the line that passes through (3,10) and (4,3).

Name _____ Period _____ Group _____

Warm-up 59

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $2x(x + 1) + 5x$
2. Evaluate: $\frac{(-3)^2 + 5}{2} =$
3. Write the equation of the line that passes through the points (8, 4) and (10, 2).
4. The table below shows the trunk circumference and height of two cottonwood trees.

Circumference (in feet)	Height (in feet)
6	60
4.8	36

If x represents the circumference and y represents the height, what is the linear equation that relates x and y ?

Name _____ Period _____ Group _____

Warm-up 60

SHOW ALL WORK

Date _____ Score _____

- Solve: $3x + 1 < 28$
- Solve: $2x + 3 = 4x - 7$
- Determine whether or not the number of college and community orchestras in the US from 1980 to 1988 has a linear relationship.

Orchestras, x	1311	1311	1304	1306	1317	1317	1298	1301	1253
Year, y	1980	1981	1982	1983	1984	1985	1986	1987	1988

- If the relationship from question 3 is linear, write the equation of the line that describes this relationship.

Name _____ Period _____ Group _____

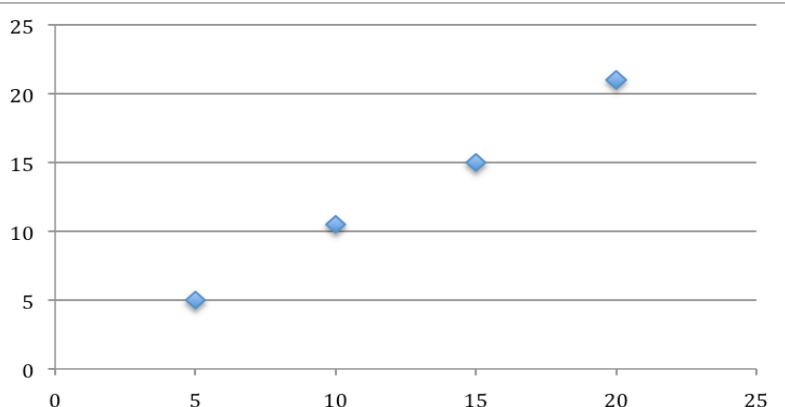
Warm-up 61

SHOW ALL WORK

Date _____ Score _____

- Solve: $4x + 3 = -6x - 7$
- Solve: $2x + 3 \geq 3 - (x + 1)$
- As your family is traveling along I-15, you note the distance traveled every 5 minutes. A graph of time and distance shows that the relation is approximately linear. Write the equation of the line that fits your journey of 50 miles.

- What does the slope represent



Name _____ Period _____ Group _____

Warm-up 62

SHOW ALL WORK

Date _____ Score _____

1. Solve: $-2(x + 3) \geq 3 - (x + 7)$

If we start with 4 pennies in a jar, and add 5 pennies each day, how many pennies would be in the jar at the end of

2. Day 1? _____

3. Day 2? _____

4. Day 3? _____

5. Day x ? _____

Name _____ Period _____ Group _____

Warm-up 63

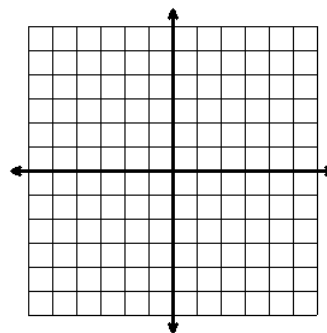
SHOW ALL WORK

Date _____ Score _____

1. Solve: $\frac{3}{6} = \frac{12}{d}$

2. The data in this table shows the number of people y (in millions) in the United States that were employed from 1983 to 1993. Let x represent the year and $x=3$ correspond to 1983. (Source: U.S. Bureau of Labor Statistics.) Would you characterize the relationship as positive, negative or approximately zero correlation?

x	3	5	8	10	13
y	113	117	123	126	130



3. Write a line of best fit that matches the given data.

5. Predict how many people were employed in 2007. (Hint: What would x be in the year 2007?)

Name _____ Period _____ Group _____

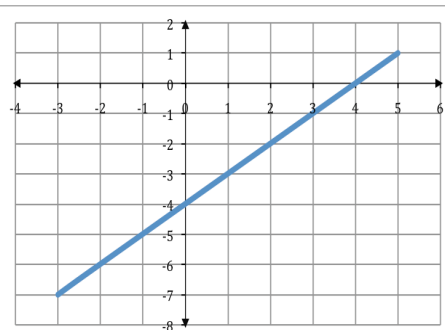
Warm-up 64

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4x - 7x + 3$
2. Solve: $3x + 2(x - 1) = 27$
3. Find the x- and y-intercepts of the following table:
4. Find the x- and y-intercepts of the following graph:
5. Find the x- and y-intercepts of the following equation:
 $y = 4x + 5$

x	y
0	-3
1	-2
2	-1
3	0



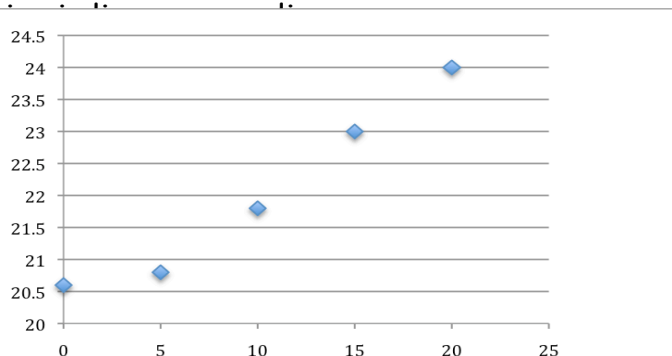
Name _____ Period _____ Group _____

Warm-up 65

SHOW ALL WORK

Date _____ Score _____

1. Solve: $6x + 7 = -13 + 2x$
2. Solve for d: $3a + 9d = 7$
3. Determine if the following correlation is positive, negative, or zero.
4. Is it positive or negative or zero correlation?



Name _____ Period _____ Group _____

Warm-up 66

SHOW ALL WORK

Date _____ Score _____

1. Solve for c : $\frac{a+c}{d} = 3$

2. $6^2 - 4(-2)$

Given the following data, determine lines of best fit:

3. for men's life expectancy

4. for women's life expectancy

Life Expectancy in Years at Birth (United States)		
Year	Men	Women
1988	71.4	78.3
1989	71.7	78.5
1990	71.8	78.8
1991	72.0	78.9
1992	72.3	79.1

5. If the trend continues, will the life expectancy for men and women ever be the same?

Name _____ Period _____ Group _____

Warm-up 67

SHOW ALL WORK

Date _____ Score _____

1. $4^2 \div 8 + 5(8 - 2) \cdot 2$

2. Simplify: $2(x + 1) - (-7x)$

Tara weighed some metal objects. She weighed them in air, then weighed them when they were submerged in water. Her results are shown in the table below.

Weight in Air (g)	350	420	260	310	680
Weight in Water (g)	280	350	200	250	550

3. Plot the points on a coordinate system. Draw a line of best fit.

4. Find the equation of the line of best fit.

Name _____ Period _____ Group _____

Warm-up 68

SHOW ALL WORK

Date _____ Score _____

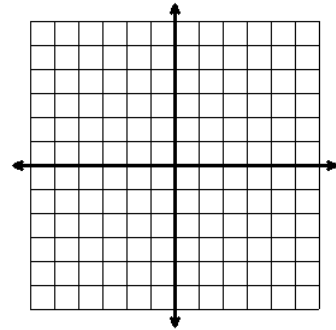
1. Simplify: $-6(x + 2) - (-4x)$

2. Solve: $2d + 3(d + 1) = 18$

3. Determine if $(2, 3)$ is a solution to $y \leq x + 1$

4. Graph on the coordinate system to the left: $y \leq x + 1$

5. Is the line dotted or solid? Why?



Name _____ Period _____ Group _____

Warm-up 69

SHOW ALL WORK

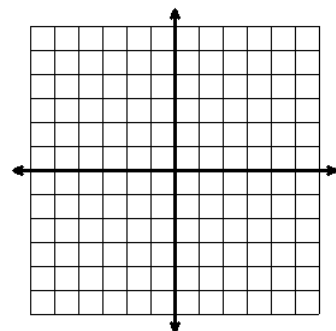
Date _____ Score _____

1. Solve: $2y + \frac{1}{6} = \frac{2}{3} - y$

2. Solve: $x + \frac{1}{2} = 1$

3. Graph: $6x + 3y > 12$

4. In 2-3 sentences, explain how you decided where to shade the graph.



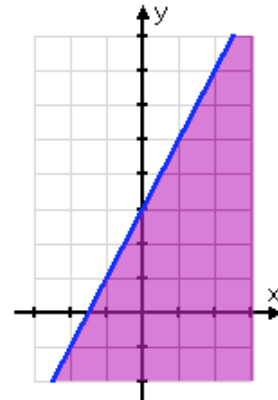
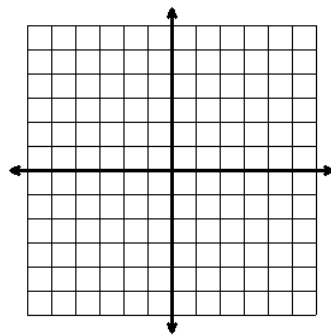
Name _____ Period _____ Group _____

Warm-up 70

SHOW ALL WORK

Date _____ Score _____

1. Solve: $2x + 3 = 4x - 4$
2. Solve: $3x + 2(x - 1) = 27$
3. What is the inequality of the following graph?
4. Graph: $y < \frac{1}{2}x + 2$



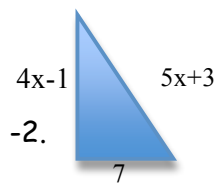
Name _____ Period _____ Group _____

Warm-up 71

SHOW ALL WORK

Date _____ Score _____

1. If the perimeter of this right triangle is 34 units, find the value of x .
2. $6^2 - 4(-2)$
3. Write the equation of a line that passes through $(-2, 4)$ with a slope of -2 .
4. Write the equation of a line that passes through $(1, 2)$ and $(0, 3)$.
5. What is the slope of the following line: $4x + 4y = 12$?



Name _____ Period _____ Group _____

Warm-up 72

SHOW ALL WORK

Date _____ Score _____

1. Solve: $2x + 4x + 2 = 26$

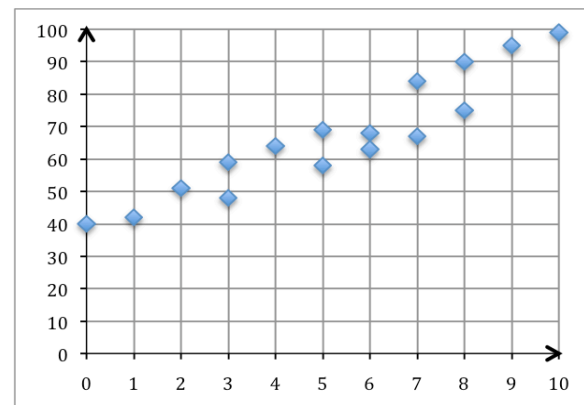
2. Solve: $3(2x-4) = 24$

Fifteen students were asked on Wednesday to keep track of the number of hours they spent studying for a test on Monday. The data of their study hours and test score is graphed here.

3. Estimate a line of best fit.

4. Describe the meaning of the slope.

5. Describe the meaning of the y-intercept.



Name _____ Period _____ Group _____

Warm-up 73

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $\frac{5x+10}{5}$

2. Simplify: $-3(x+5)$

3. Find the line of best fit for the relationship between total fat and total calories for fast food sandwiches (source: nutrition.mcdonalds.com):

Sandwich	Total fat (g)	Total Calories
Hamburger	9	250
Cheeseburger	12	300
Quarter Pounder	19	410
Quarter Pounder with Cheese	26	510
Big Mac	29	540
Filet-O-Fish	18	380
McChicken	16	360
McRib	26	500

4. Predict how many calories a sandwich with 22 grams of fat would have.

Name _____ Period _____ Group _____

Warm-up 74

SHOW ALL WORK

Date _____ Score _____

1. Solve: $2x + 3 = 3 - (x + 1)$
2. If $a=3$ and $b=6$, then find $a^2 - b^2$
3. Make a scatter plot of the following data for the winning time for men's 100 m freestyle:

Year	1980	1984	1988	1992	1996	2000	2004	2008
Seconds	50.40	49.80	48.63	49.02	48.74	48.30	48.17	47.21

Sources: infoplease.com and nbcolympics.com

4. Find the line of best fit for this data.

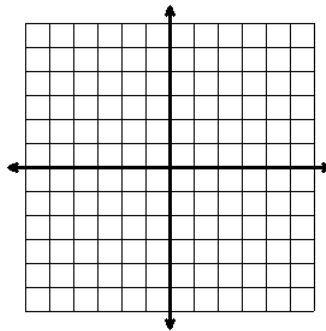
Name _____ Period _____ Group _____

Warm-up 75

SHOW ALL WORK

Date _____ Score _____

1. Draw a line going through the points $(-2, 5)$ and $(4, 2)$.
2. What is the equation of the line above?
3. Estimate the equation of the line that goes through $(0, 2)$, $(6, 1)$, $(7, 2)$, and $(3, 11)$
4. Estimate the equation of the line that goes through $(2, 0)$, $(6, 1)$, $(7, 2)$, $(10, 3)$



5. Explain the difference between positive and negative correlation on a scatter plot.

Name _____ Period _____ Group _____

Warm-up 76

SHOW ALL WORK

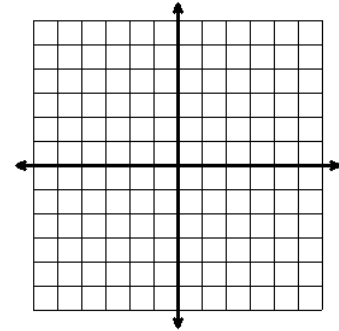
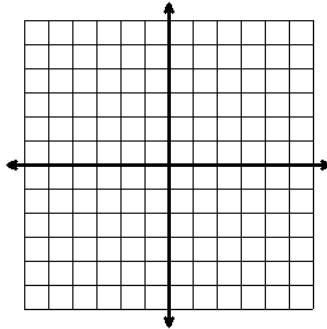
Date _____ Score _____

1. Plot the points $(-3, -4)$ and $(2, 3)$

2. Graph $y = -x$

3. On the same grid, graph $y = 2x$

4. Find the point of intersection of the two points.



Name _____ Period _____ Group _____

Warm-up 77

SHOW ALL WORK

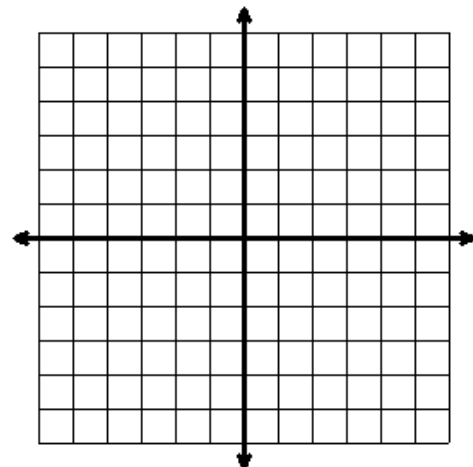
Date _____ Score _____

1. Simplify: $\frac{(-4)^2 + 6}{2}$

2. Find the slope of $3x + 4y = 12$.

3. Find the solution to $\begin{cases} x - y = 6 \\ x + 2y = -9 \end{cases}$ graphically.

4. Find the solution to $\begin{cases} y = 3x + 7 \\ y = 2x - 6 \end{cases}$ graphically.



Name _____ Period _____ Group _____

Warm-up 78

SHOW ALL WORK

Date _____ Score _____

1. Reduce the fraction: $\frac{2}{6}$

2. Find the equation of the line according to this table:

x	0	3	6
y	5	10	15

3. Solve algebraically: $\begin{cases} 2x + y = 1 \\ y = 2 - x \end{cases}$

4. Solve algebraically: $\begin{cases} x = -2y + 1 \\ 2x - 8y = -1 \end{cases}$

5. Solve algebraically: $\begin{cases} x - y = 6 \\ x = 7 \end{cases}$

Name _____ Period _____ Group _____

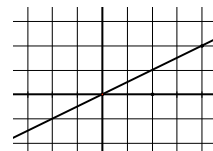
Warm-up 79

SHOW ALL WORK

Date _____ Score _____

1. Does the line below have a positive or negative slope?

2. Find the equation of a line that passes through the origin and (2, 4).



3. Solve algebraically: $\begin{cases} 4x + 5y = 3 \\ -2x - 5y = 11 \end{cases}$

4. Solve algebraically: $\begin{cases} 2x + y = 1 \\ x + y = 2 \end{cases}$

5. Solve algebraically: $\begin{cases} 2x + 3y = -6 \\ -5x - 9y = 14 \end{cases}$

Name _____ Period _____ Group _____

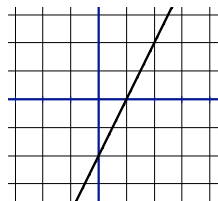
Warm-up 80

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4^2 \div 8 + 5[8 - (-2)] \cdot 2$

2. Find the equation of the line:



3. Solve algebraically: $\begin{cases} y = 7x \\ 2x - y = -10 \end{cases}$

4. Solve algebraically: $\begin{cases} 5x + 2y = 8 \\ x + y = 1 \end{cases}$

5. Solve algebraically: $\begin{cases} 3x + 2y = 6 \\ x + y = 0 \end{cases}$

Name _____ Period _____ Group _____

Warm-up 81

SHOW ALL WORK

Date _____ Score _____

1. Solve: $3(2x - 4) = 24$

2. Find the equation of the line from the following table:

x	1	3	5
y	10	20	30

3. Solve algebraically: $\begin{cases} y = 4 \\ y = x + 1 \end{cases}$

4. Solve algebraically: $\begin{cases} 2x + 8y = 6 \\ x = 5 - 4y \end{cases}$

5. Solve algebraically: $\begin{cases} 5x - 4y = 2 \\ -3x + 4y = 2 \end{cases}$

Name _____ Period _____ Group _____

Warm-up 82

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $\frac{0}{5}$

2. Find the equation of the following line:

X	Y
1	4
2	7

For the following systems of equations, determine how many possible solutions there are.

3.
$$\begin{cases} y = 3x + 4 \\ y = 3x - 7 \end{cases}$$

4.
$$\begin{cases} y = \frac{1}{2}x + 4 \\ y = -2x - \frac{1}{4} \end{cases}$$

5.
$$\begin{cases} 2x + 8y = 6 \\ x = 3 - 4y \end{cases}$$

Name _____ Period _____ Group _____

Warm-up 83

SHOW ALL WORK

Date _____ Score _____

1. If $c = -2$ and $d = 3$, then $2c^2 - 5d =$

2. Find the equation of this linear function:

x	2	4	6
y	6	12	18

For the following systems of equations, determine how many possible solutions there are. If there is only one, find it.

3.
$$\begin{cases} y = 3 - 2x \\ 6x + 3y = 9 \end{cases}$$

4.
$$\begin{cases} 3x - 2y = 7 \\ 4y = -14 + 6x \end{cases}$$

Name _____ Period _____ Group _____

Warm-up 84

SHOW ALL WORK

Date _____ Score _____

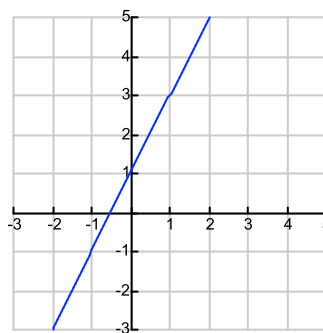
1. Evaluate: $2^4 - (-2)(6)$

2. Find the equation of the line:

Determine the number of possible solutions for these systems of equations. If there is only one solution, find it.

3.
$$\begin{cases} 2x + y = 3 \\ 4x + 2y = 8 \end{cases}$$

4.
$$\begin{cases} 3x + 6y = 2 \\ 6x + 6y = 4 \end{cases}$$



Name _____ Period _____ Group _____

Warm-up 85

SHOW ALL WORK

Date _____ Score _____

1. Find the equation:

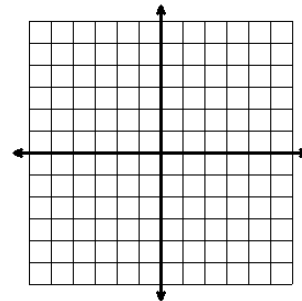
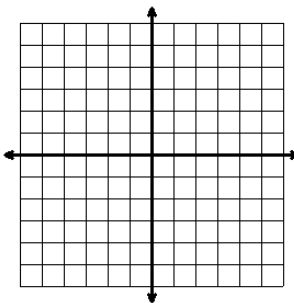
x	0	2	4
y	7	11	15

2. Graph $y = 2x - 3$ on the top coordinate grid.

3. Graph $y < x + 1$ on the bottom one.

4. Graph $y > 2$ on the same grid as #3.

5. Find where they overlap.



Name _____ Period _____ Group _____

Warm-up 86

SHOW ALL WORK

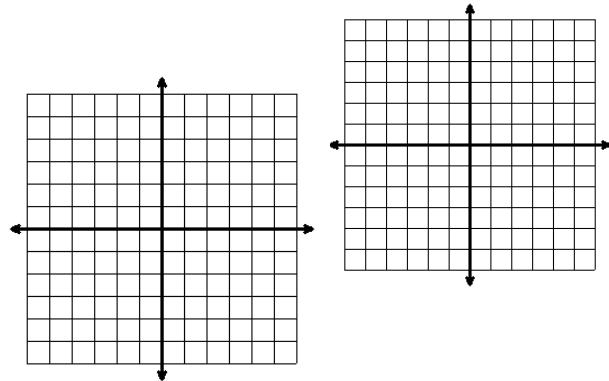
Date _____ Score _____

1. Solve for y: $3(2y - 4) = x$

2. Solve: $2x + 3 = 4x - 4$

3. Graph the solution area for $\begin{cases} y > x - 1 \\ x > y - 2 \end{cases}$

4. Graph the solution area for $\begin{cases} -x < y + 7 \\ y \geq x - 7 \end{cases}$



Name _____ Period _____ Group _____

Warm-up 87

SHOW ALL WORK

Date _____ Score _____

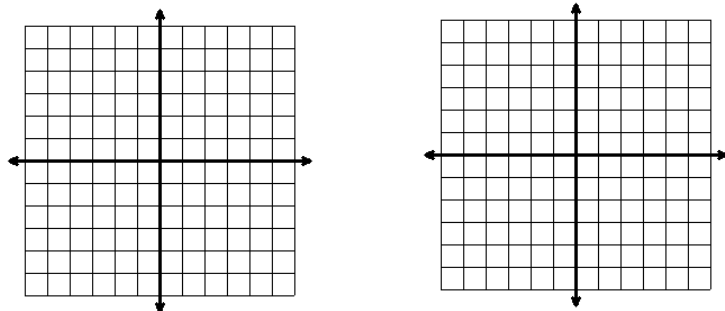
1. Order from **greatest to least**: $-2, 1, -4, -\frac{1}{2}$

2. Simplify: $a^2 + 3a + 2a^2 - 5a$

Solve by graphing:

3. $\begin{cases} y \geq -2 \\ y < \frac{1}{2}x + 2 \end{cases}$

4. $\begin{cases} 6x + 3y > 12 \\ y \leq 2x + 3 \end{cases}$



Name _____ Period _____ Group _____

Warm-up 88

SHOW ALL WORK

Date _____ Score _____

1. Solve: $3x + 6 = 15$

2. Order from **least to greatest**: $2, \frac{1}{3}, \sqrt{16}, 5$

Solve the following systems of equations:

3.
$$\begin{cases} 5x - 4y = 2 \\ -3x + 4y = 2 \end{cases}$$

4.
$$\begin{cases} 5x + 7y = 4 \\ -x - 2y = -2 \end{cases}$$

5.
$$\begin{cases} 2x + 3y = 7 \\ x + 4y = 9 \end{cases}$$

Name _____ Period _____ Group _____

Warm-up 89

SHOW ALL WORK

Date _____ Score _____

1. What two whole numbers is $\sqrt{20}$ in between?

2. What two whole numbers is $\sqrt{40}$ in between?

Simplify the following expressions

3. $(6x^2)(4x^2y^3)$

4. $(3x^3z^2)(-6y^5)$

5. $(6x^2)^3$

Name _____ Period _____ Group _____

Warm-up 90

SHOW ALL WORK

Date _____ Score _____

1. Evaluate a^2 for $a = 7$

2. Find the equation of the following linear relationship:

x	0	2	4	6
y	10	7	4	1

Simplify the following expressions:

3. $(-3b^2)^5$

4. $(-3x^5)^2$

5. $(-4)^0(x^3)^4$

Name _____ Period _____ Group _____

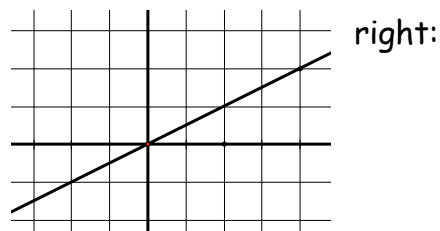
Warm-up 91

SHOW ALL WORK

Date _____ Score _____

1. Evaluate $\frac{1}{b^2}$ for $b = 3$

2. Find the equation of the line graphed to the



Simplify the following expressions:

3. $(a^2b^7)^0$

4. $v^0w^2(y^{11})^2$

5. $\frac{a^4b^7}{ab^6}$

Name _____ Period _____ Group _____

Warm-up 92

SHOW ALL WORK

Date _____ Score _____

1. Evaluate c^2d for $c = 3$ and $d = 4$

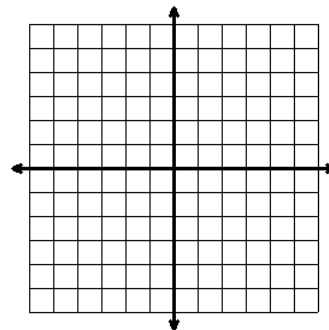
2. Graph $y = 2x - 2$

Simplify the following expressions:

3. $\frac{8b^7}{2b^3}$

4. $\left(\frac{8w^7}{16}\right)^2$

5. $\frac{25b^{-2}}{5b^6}$



Name _____ Period _____ Group _____

Warm-up 93

SHOW ALL WORK

Date _____ Score _____

1. Between what two whole numbers is $\sqrt{8}$. Show how you know this.

2. Find the equation of the line that goes through (1, 1) and (2, 3).

Simplify:

3. $(3x^3 + 2x - 3) + (x^3 - 4)$

4. $(12x^3 + 7x - 2) + (4x^2 + 3x - 4)$

5. $(2y^3 + y^2 - 1) + (3y^3 - y^2 + 4)$

Name _____ Period _____ Group _____

Warm-up 94

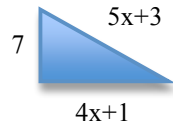
SHOW ALL WORK

Date _____ Score _____

1. Simplify: $3 + 2(x - 1)$

2. Order from **greatest to least**: $\sqrt{4}$, 3, 4.25, -2

3. Find the perimeter:



Simplify:

4. $(3x^2 - 5x - 3) + (2x^2 - x + 4)$

5. $(2x^2 + 5x) + (x^2 - 4)$

Name _____ Period _____ Group _____

Warm-up 95

SHOW ALL WORK

Date _____ Score _____

1. Simplify $5a^2 + 3b - 2a^2 + b$

2. Evaluate $2c^2 - 5d$ for $c = -3$ and $d = 2$.

Simplify:

3. $(4y^2 - y + 6) - (3y^2 - 4)$

4. $(8b^2 - 1) - (b^2 - b)$

5. Explain how to find $(3b^2 - 2b + 1) - (b^2 + b - 3)$

Name _____ Period _____ Group _____

Warm-up 96

SHOW ALL WORK

Date _____ Score _____

1. If $y = 3x - 4$, find y if $x = 2$.

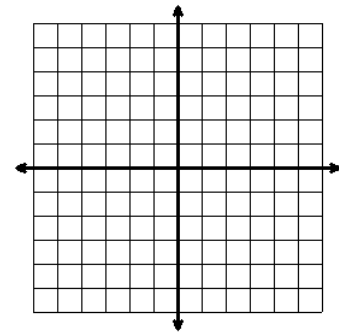
2. Graph $y = 2x + 1$

Simplify:

3. $(1 - 2b - x^4) - (-3b^2 + b + 9)$

4. $(5 - 3x - 1.4x^2) - (13.7x - 62 + 5.2x^2)$

5. $(4b^5 - 3b^3 - 2b - 1) - (b - 2b^2 + 3b + 3)$



Name _____ Period _____ Group _____

Warm-up 97

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $2 + 3(x - 4) - 7x$

2. Solve: $2x - 1 = 3 - 4(x + 4)$

Multiply:

3. $3x(x + 2)$

4. $3x^2(4x^3 - 3x^2)$

5. $3x^2y^3(4x^3 - 3x^2 + 2y)$

Name _____ Period _____ Group _____

Warm-up 98

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $4 + 2(x - 5) - (4x)$

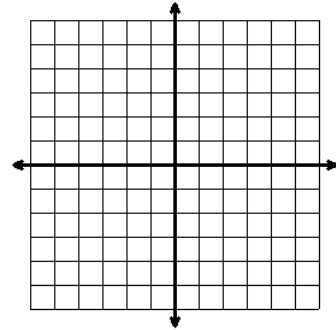
2. Graph: $y = 3x - 2$

Multiply:

3. $6y^2(3y^2 - 1)$

4. $8y^3(4x^3 - 8y^2 + 2y)$

5. $2x^2y(3x^3 - 3xy + y^5)$



Name _____ Period _____ Group _____

Warm-up 99

SHOW ALL WORK

Date _____ Score _____

1. Solve: $5x + 7 = 2(x + 4)$

2. $\sqrt{15}$ is between what two whole numbers?

Multiply:

3. $(x + 2)(x + 3)$

4. $(x + 10)(x + 7)$

5. $(x - 6)(x - 3)$

Name _____ Period _____ Group _____

Warm-up 100

SHOW ALL WORK

Date _____ Score _____

1. Find the equation for the following linear relationship:

x	2	4	6
y	6	12	18

2. Find the equation of the line that passes through (1, 5) and (2, 8).

Multiply:

3. $(x - 2)(x + 1)$
4. $(4x - 2)(x - 3)$
5. $(2x - 5)(6x + 8)$

Name _____ Period _____ Group _____

Warm-up 101

SHOW ALL WORK

Date _____ Score _____

1. Simplify: $(5x)^2$
2. Graph: $y = 3x + 2$

Multiply:

3. $(x + 5)^2$
4. $(x - 9)^2$
5. $(3x + 2)(2x - 9)$

